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Columbia River Channel Improvement Study—Wildlife Mitigation

Initial mitigation efforts centered upon avoidance and minimization of impacts to wildlife habitat, to the extent practicable, during selection of dredged material disposal sites. Compensatory mitigation evaluations were initiated for those upland disposal sites that supported wildlife habitat. Compensatory mitigation is simply the restoration or development of wildlife habitat to replace those wildlife values lost due to project related actions.

To determine compensatory mitigation levels, an interagency wildlife mitigation team was formed. The team consisted of representatives from the Corps, U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, and Washington Department of Ecology. The USFWS's Habitat Evaluation Procedures (HEP) process was selected as the analytical means to assess project related wildlife impacts and mitigation attainment levels. The HEP process assesses both habitat quality and quantity at proposed disposal and mitigation sites for target species selected by the HEP team. Target species are selected as representative members of the habitats present in the area of impact.

Implementation of the least cost disposal plan would require mitigation of wildlife habitat losses at 16 disposal locations. The emphasis on avoidance of wetland and riparian habitat during the selection process for disposal sites resulted in the majority of habitat impacts on agricultural lands. An estimated 398 acres of agricultural lands would be lost due to dredged material deposition. Agricultural lands impacted by disposal actions are principally pasturelands and cereal grain/row crop fields. This habitat is probably most important to wintering waterfowl, particularly Canada geese.

Riparian habitat losses were estimated at 66 acres. Wetland habitat losses were estimated at 38 acres. These losses occurred at three locations and include wetland habitat associated with drainage ditches and land grazed lightly by livestock.

The HEP process analyzes wildlife impacts in the terms of average annual habitat units (AAHUs), a measure of habitat quality and quantity measured over the project life (50 years). An estimated loss of 972 AAHUs would occur with implementation of the least cost disposal plan. Five sites--Joslin, Sauvie 94, Woodland Bottoms, Martin Island, and Webb—a total of 1,137 acres, were determined to produce sufficient AAHUs (1,033) to offset project related losses. Mitigation management actions would entail use of 1,027 acres of the total acreage on these five sites. Wetland habitat development or improvements would occur on 355 acres. Riparian habitat development or improvement would encompass 424 acres. Agricultural management, such as permanent pastureland, would occur on 248 acres.

Mitigation requirements for the sponsor's disposal alternative are less than those for the least cost alternative. The reduced requirement results from the use of fewer new upland disposal sites. Implementation of the sponsor's plan would impact an estimated 193 acres of agricultural lands, 73 acres of riparian forest and 30 acres of wetlands.

The HEP analysis indicated a project-related loss of 482 AAHUs for the sponsor preferred disposal plan. Two sites--Woodland Bottoms and Webb--providing 473.5 AAHUs, were initially identified as the best locations for mitigation actions. Use of these sites would not equitably distribute mitigation efforts between Washington and Oregon, however. This lack of equitability was discussed between the project sponsors, the Corps of Engineers and state resource agencies. It was concluded that a more equitable plan for mitigation would be developed. A more balanced combination of mitigation sites would be comprised of Martin Island and Woodland Bottoms in Washington and the Webb location in Oregon. This balanced combination would produce 516 AAHUs in Washington and 182 AAHUs in Oregon.

The balanced mitigation plan would cover about 808 acres of land. Mitigation actions would occur on 700 of those acres. Mitigation lands in Oregon encompass 147 acres; a total of 661 acres on two parcels would be in Washington. Wetland habitat development would occur on 236 acres; with 100 acres of wetland development in Oregon. Riparian habitat development would total 331 acres. All but 43 of those acres would be in Washington. The balanced mitigation plan also includes agricultural forage development on 132 acres in Washington.